POTAIN®

Lift Solutions
Catalog

Manitowoc reserves the option of making any changes to this document that we deem beneficial, at any time.

Potain, the world's leading tower crane manufacturer

Potain superior tower cranes for any jobsite.
No matter how challenging your construction project is, Potain has a tower crane perfectly suited for your needs.
Our product offering includes :

- Top slewing tower cranes (MCT, MDT City, MDT, MD, MD Maxi and Topbelt)
- Luffing jib tower cranes (MRH and MR)
- Self-erecting cranes (Igo, Igo M, Hup M, Hup and Igo T)
- Special application cranes on demand

Leader in Special Application Cranes

With 90 years in the tower crane business, we design and manufacture large tower cranes for special applications such as:

- Dams
- Bridges
- Shipyards
- Power plants
- Industries
- High rise buildings
- Specific applications

With the support of a strong worldwide sales organization, a highly qualified team provides support for these special projects and provides continuous service and support to their customers.
These full solutions embrace the following aspects:

- Complete technical engineering and studies for all applications
- General layout of equipment
- Budget cost evaluation including engineering, fabrication, erection, services
- Training, maintenance, and service supervision

Contact :

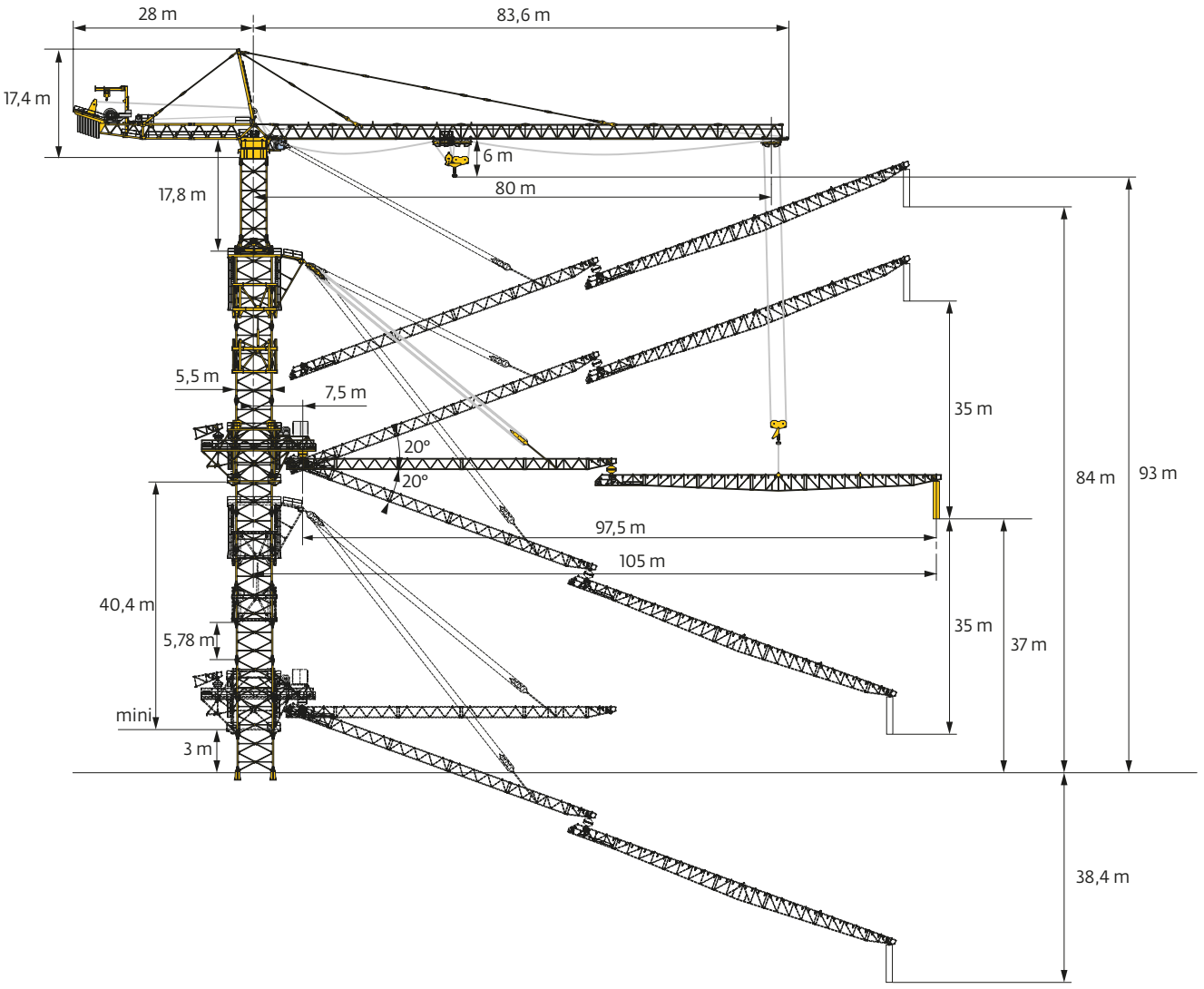
► email : patrice.penanhoat@manitowoc.com

► Tel : +33 (0)4 72 18 20 03

Table of contents

Dam applications

MD 2200 Topbelt 30 - Data

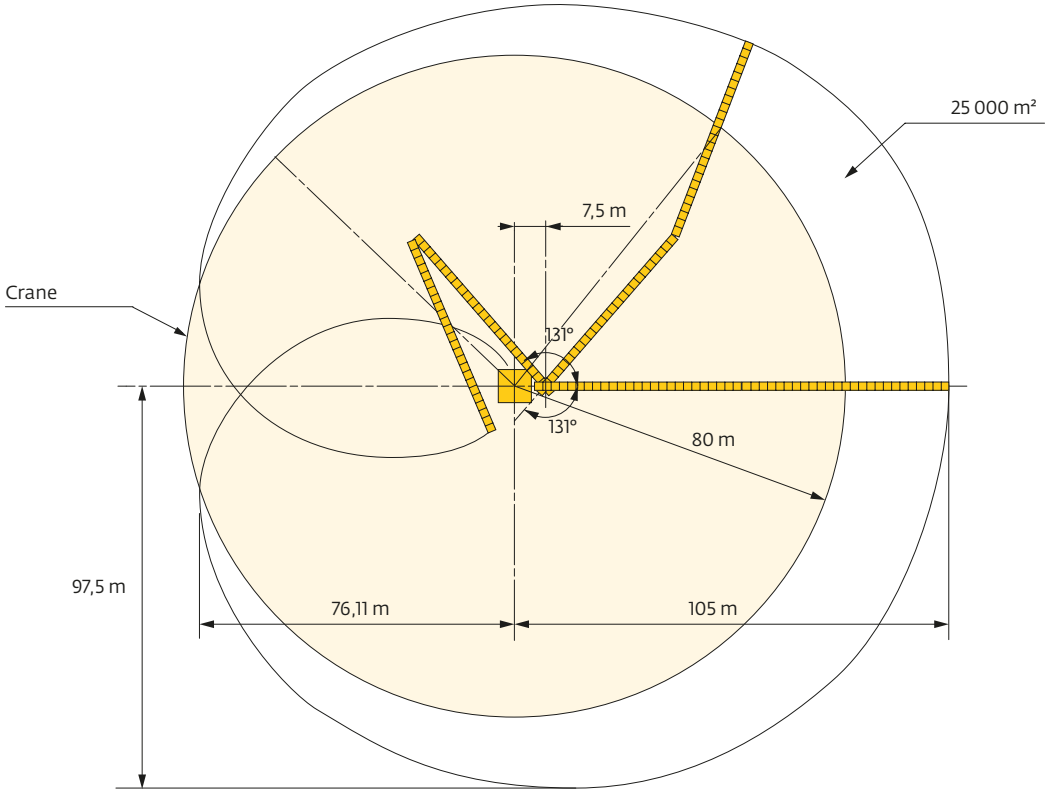


Specifications

- Maximum load 60 t
- Radius 80 m
- Tip load 22,8 t
- Concrete bucket at maximum radius 9 m^3
- Free standing height 93 m
- Belt conveyor capacity 400 m^3/h
- Belt conveyor maximum radius 105 m

Concrete placing area

Max pouring radius = 105 m from mast center
Topbelt covering area = 25000 m²



The Topbelt system can be set at various inclinations, and the platform can be telescoped along the mast as the work progresses.
It can also be folded in parking position to use the crane hook.

The crane is designed for heavy handling as well as conveyor support.

MD 2200 : Main advantages

Crane

- Hoisting 270 LVF / Power Control
- Trolleying 25 DVF / progressive speed
- Slewing RVF / speed and torque regulation
- Ultra View cab
- Air conditioned control shelter
- Easy maintenance
- Fast hydraulic erection (1 m per hour)
- A7 FEM standard
- Use of Topbelt or 6/9 m^3 bucket

Topbelt

- High rate of concrete pouring 400 m^3/h
- 105 m max pouring radius
- Maximum inclined and declined angles: 20°
- No concrete segregation
- Unlimited dam height
- Quick hydraulic, telescopic Topbelt system (3 m per hour)
- Easy maintenance and service
- Belt long lasting, idlers, mechanical parts
- Control from the driver's cab of up to 10 overland conveyors

Conveyor and bucket pouring

Conveyor extremity

6 to 9 m^3

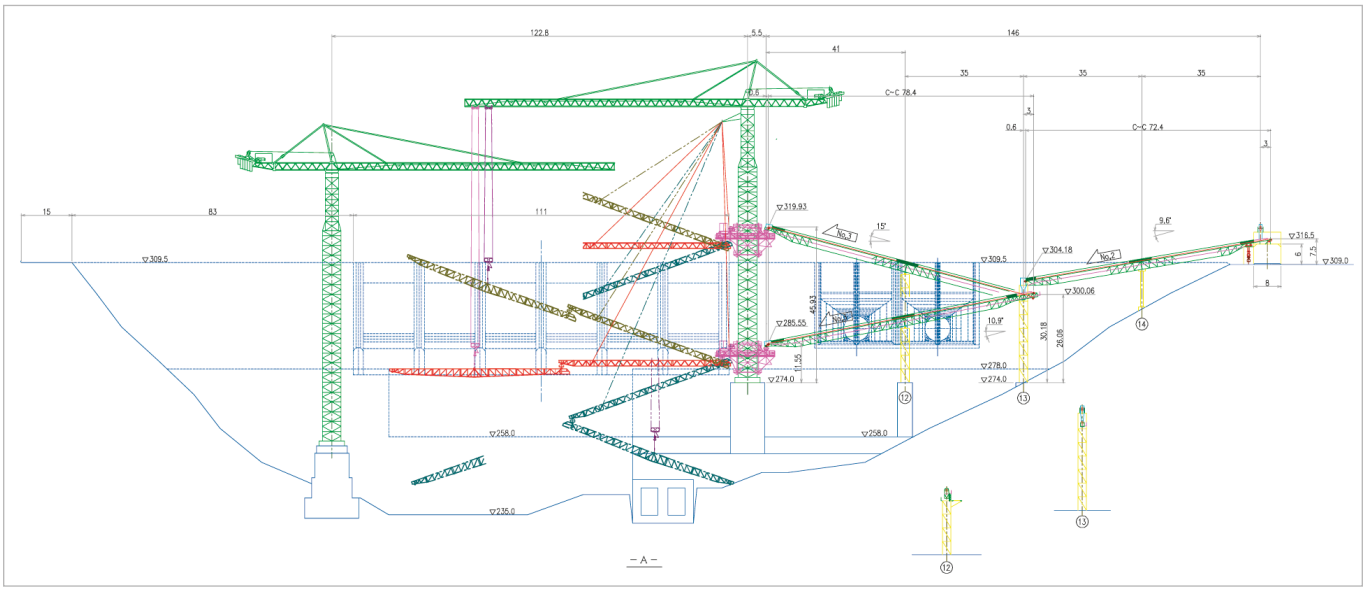
MD 2200 - Three Gorges Dam (China)

The contractor CTGPC decided to pour the concrete from tower cranes on which articulated conveyors called Topbelt were attached.
This conveyor's system allowed a production of 300 to 400 m³ per hour with a maximum radius of 105 m and unlimited height.

Jobsite specifications

- 2300 m crest length
- 175 m high
- 27 millions m³ of concrete
- 600 000 t of steel
- 18 200 MW of capacity
- 10 years of study
- 17 years of work
- 30 000 people working night & day

MD 2200 - Sesan 3 Dam (Vietnam)



MD 900 B - Sesan 3A Dam (Vietnam)

The Vietnamese Son Da Corporation company ordered 4 MD 900 B cranes for dam construction.
The 250 LCC hoisting mechanism enables a productivity of approx. 70-80 m³/h depending on the site conditions.
Trolleying and slewing mechanisms with frequency variations.

Crane specifications

- Radius 60 m, tip load 13,1 t
- Maximum load 50 t at 21,1 m
- Hook height 60,5 m
- 6 m³ bucket hydraulic-control

Applications

- 1 crane on Sesan 3 dam
- 1 crane on Sesan 3A dam in the south
- 2 cranes on Tuyen Quang dam in the north

MD 2200, MD 2200 Topbelt, MD 1800 Longtan Dam (China)

The Longtan Hydropower Development Co Ltd purchased 3 Potain giant tower cranes, with latest technology, for the construction of the Longtan Dam in Guangxi Province.
The project was to build concrete gravity dam, with roller compacted concrete for the spillway and conventional concrete for the power house and the ship lock.
3 620 000 m³ roller compacted concrete were poured, including 590 000 m³ for the coffer dam. The final dam height is 190 m and the crest length is 750 m. Completion 2010.

Cranes specifications

- 1 MD 2200: 185,6 m height equipped with a Topbelt system
- 1 MD 2200: 139 m height
- 1 MD 1800: 112,5 m height travelling on portal chassis 15 x 15 m

MD 2200 & MD 1100 - Boyabat dam (Turkey)

The Boyabat dam project was made with conventional vibrated concrete (CVC), built by blocks using conveyor system and tower cranes. It is located in North Central Turkey near the Black Sea. The main purpose of the tower cranes is to handle 20 t loads such as reinforcement, rebars, conveyor trusses, penstocks and 9 or 6 m³ of concrete buckets anywhere on the dam project.
The main tower cranes MD 2200 are equipped with a crane operator lift inside the tower.

Cranes specifications

- Crane 1: MD 2200, hook height 104,5 m, radius 85 m/ tip load 20 t, maximum load 64 t
- Crane 2: MD 2200, hook height 225,7 m, radius 85 m/ tip load 20 t, maximum load 64 t
- Crane 3: MD 1100, hook height 137,1 m, radius 60 m/ tip load 18 t, maximum load 40 t
- Crane 4: MD 1100, hook height 120 m, radius 65 m/ tip load 15,9 t, maximum load 40 t

Dam specifications

- Concrete total volume: 3 000 000 m³
- Height 195 m
- Crest length 263 m
- Width 213 m

MD 1600 Topbelt - Xayaburi Dam (Laos)

Ch. Karnchang chose Potain for the construction of the hydropower mega project across the Mekong river in northern Laos, the Xayaburi dam (1285 MW, 820 m long).
Among 19 Potain cranes, 2 MD 1600 fitted with Topbelt concrete placing system have been erected.
Their primary task is to place the Roller Compacted Concrete at a rate of 250 m^3 per hour through the conveyor line coming directly from batching plant.
These giant 64 t capacity cranes work 24/7 on the project which has been planned for an 8 years duration.

Cranes specifications

- Capacity 64 t at 24,6 m
- Maximum radius 80 m crane (tip load 17,4 t)
- Maximum radius for Topbelt conveyors 105 m
- RC Concrete placing rate 250 m^3 per hour
- Hook height 91,6 m
- Fixing angles

MD 1600 & MCT 565 – Julius Nyerere Dam (Tanzania)

Potain customized an MD 1600 and an MCT 565 for the construction and the equipment of the powerhouse of the Julius Nyerere dam across the Rufiji River at Stiegler's Gorge in Tanzania.

MD 1600 is fitted with an exceptional lifting function for the safe installation at 31,7 m maximum radius of components having a weight up to 54 t. MD 1600 is also equipped with a specially designed portal mounted on a VF travelling drive including 12 bogies (three per corner).
MCT 565 is also equipped with a specially designed portal with an integral chassis mounted on a VF travelling fitted with 8 bogies (two per corner).

Cranes are moving side to side on a 10 m span and 300 m long track. Each crane includes a Potain TCL lift system for the convenience of the operators.

Cranes specifications

MD 1600	HuH 77 m Maximum load 64 t	Tip load 27,8 t at 60 m
MCT 565	HuH 67 m Maximum load 20 t	Tip load 8,7 t at 60 m

MD 1100 - Qingshuitang (China)

The Qingshuitang Dam is located in the Hunan Province - China, 72 km from Huaihua city. Gezhouba corporation acquired 2 units of MD 1100 (40 t capacity version) for the dam concreting. Both cranes operate with 6 m^3 bucket (20 t) up to 52 m radius (jib 70 m) and 3 m^3 bucket (10 t) from 52 m to 80 m radius.
Thanks to the LCC hoisting winch the power is optimized with any kind of load. An optimized speed of 46 m/min allows lifting 20 t (2 falls) while a 76 m/min optimized speed can lift 10 t.

Cranes specifications

- Travelling crane on chassis 8 m x 8 m
- Hook height 86,7 m
- Radius 80 m, tip load 10 t
- Maximum load 40 t at 22,9 m
- Counter-jib length 24 m
- Hoisting winch 250 LCC 100 (180 kW) DC
- Trolleying and slewing equipped with frequency inverter technology
- Rack ad pinion crane operator lift

MD 1100 - Pirris (Costa Rica)

Pirris is one of the largest dams ever built in Costa Rica. ICE company purchased a new MD 1100 to build the dam. The crane has been chosen for its outstanding performance and its compactness for transportation. Considering the seismic constraints of the jobsite location, the crane was reinforced to withstand maximum accelerations of 0,16 g.

Crane specifications

- Hook height 108 m with reinforced mast sections due to seismic constraints
- Radius 80 m / Tip load 10 t
- Maximum load 40 t
- Local power supply 460 V / 60 Hz

Bridge applications

MD 3600 - Nanjing Bridge (China)

Two giant cranes MD 3600 participated to the construction of the the 3rd Nanjing bridge, located above the Yang Tse River. They were specially designed to lift steel structure elements of 160 t, used for the construction of the bridge piles.

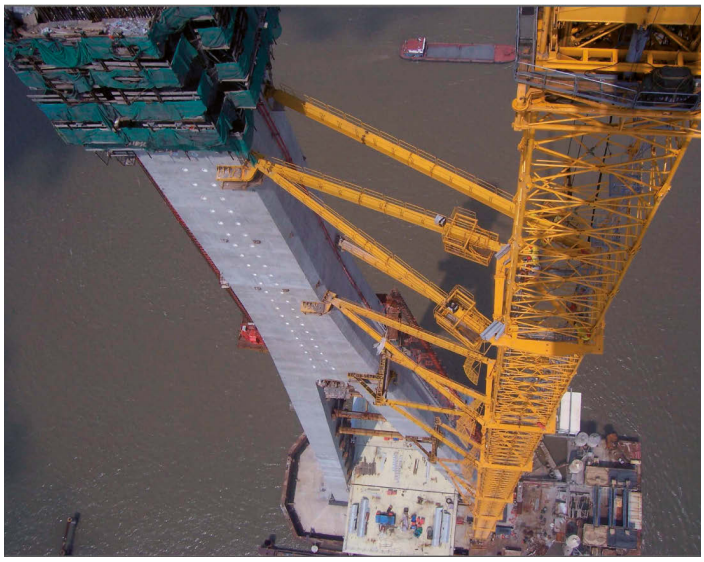
The cable stay bridge, made of 2 x 230 m high piles and an overall reach of 648 m, had to be constructed within a very short time and had to resist 200 km/h out of service wind speeds.

The piles were made of 160 t pre-assembled steel elements bolted to each other. Then the steel elements were filled with concrete. Each crane was located at 10 m from the bridge median axis and anchored at 4 levels.

The 2 independent LCC hoist winches were equipped with 2 redundant brakes for service and safety. The 2 synchronized 250 hp winches lifted the 160 t loads with speeds from 0,2 to 10 m/min.

Slewing and trolleying mechanisms with frequency variation allowing reduced positioning speeds.

MD 3600 - Sutong bridge (China)



The bridge is located above the Yang Tse river near Nantong. It was constructed with 2 steel and concrete piles reaching 300 m high. The bridge has an overall span of 1200 m. Each pile was built by a MD 3600 tower crane anchored at 6 levels. It was equipped with 2 hoist winches and trolleys : one 20 t trolley for constant loads and one 80 t trolley for heavy loads.
Cranes were equipped with an integrated operator lift.
Each 250 LCC hoist winch were equipped with redundant service and safety brakes.
Slewing and trolleying movements were based on frequency inverter technology with reduced positioning speeds.
A method has been determined for dismantling each crane by using mobile crane from the bridge deck after installation of the cable stays.

Cranes specifications

- MD 3600, 6 anchorings
- Front trolley: 80 t at 27,86 m, 38 t at 48,4 m
- Rear trolley: 20 t constant
- Hook height 306 m
- Max. out of service wind speed 220 km/h

MD 600 - Rion Antirion bridge (Greece)

The construction work started in 1999 and the bridge was completed before the opening of the Olympic Games in 2004. The bridge links the Corinth Gulf shores with an overall length of 2 883 m.

Four MD 600 cranes were working day and night for the construction of four piers at sea. Each MD 600 crane was shifted along the side of the bridge floor in order to ensure the construction of the pier 125 m above the bridge floor and the fitting of the steel ropes. The piers were connected between each other by a steel bridge floor and special steel ropes. One MD 600 crane was used for the construction of each pier.
The 250 LCC hoisting winch allows concrete heaping with a 3 m^3 grab (10 tons) at 60 m/min during hoisting and 120 m/min during lowering.
All the cranes have been designed to comply with the seismic standards of this particular region, and the four MD 600 cranes were able to work with a 3% list during construction on a floating dock.

Cranes specifications

- Maximum radius 70 m
- Maximum load 20 t

K5/50C - Millau bridge (France)

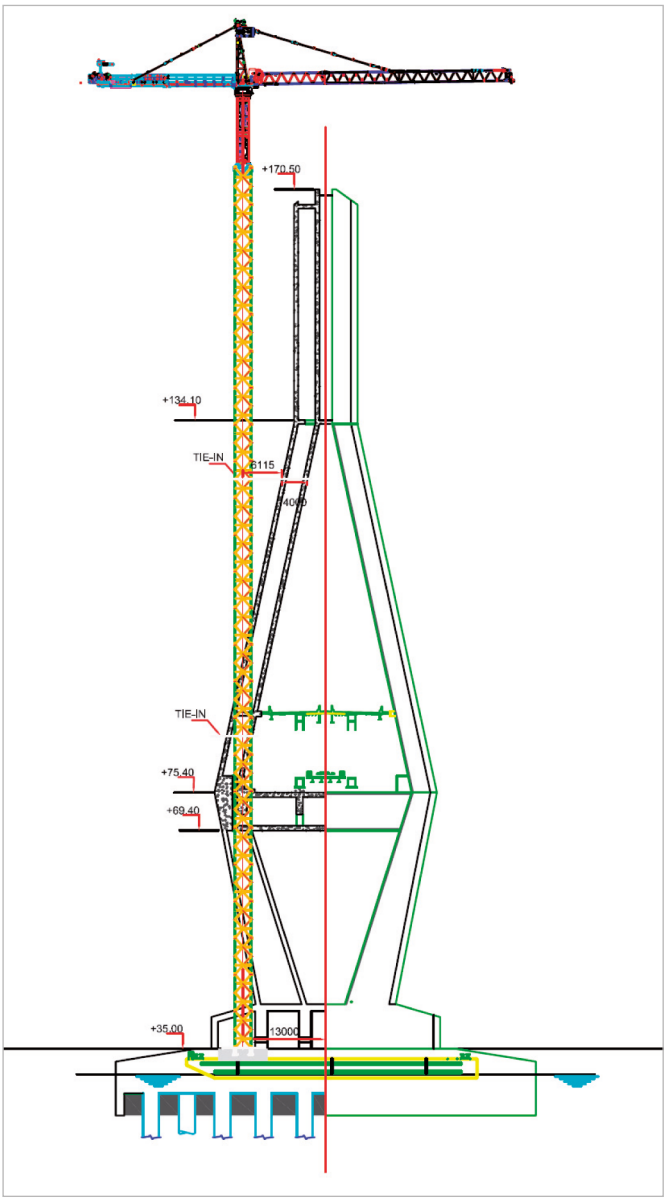
The Millau viaduct is the tallest in the world with a full height of 343 m for the highest pile summit.

The Millau Viaduct is a 2460 m long construction running over the Tarn river at an altitude of 245 m. It is made of 6 x 340 m sections (distance between 2 piles) and 2 x 200 m sections. The deck was based on a steel structure with a width of 32 m, constructed on each side of the valley and raised over it before resting on the piles. Potain provided 7 K5/50 C cranes - 1 per pile. Those cranes were used for pouring concrete with a 6 m^3 concrete bucket. The tallest crane was erected at 265 m. All cranes were designed to meet special wind conditions.

Specifications

- 7 tower cranes type K5/50 C with hook height from 95,5 m to 264,4 m

MD 560 A - Rio Orinoco (Venezuela)



The Mercosur bridge is one of the most prestigious projects in South America. It is built on the Rio Orinoco river in Caicara, Bolivar province in Venezuela.
It is composed of 2 concrete main piles of 137 m height, at a distance of 300 m.
Two MD 560 A were purchased by Odebrecht for the construction of each pile.

Crane specifications

- Hook height 147,8 m
- Maximum radius 40 m
- Free standing height 66,9 m
- Maximum load 40 t at 17,3 m(4 falls)
- Tip load at 40 m 16 t (2 falls)
- Second stage 107,3 m with 1 anchorage
- Third stage: 147,8 m with 2 anchorages

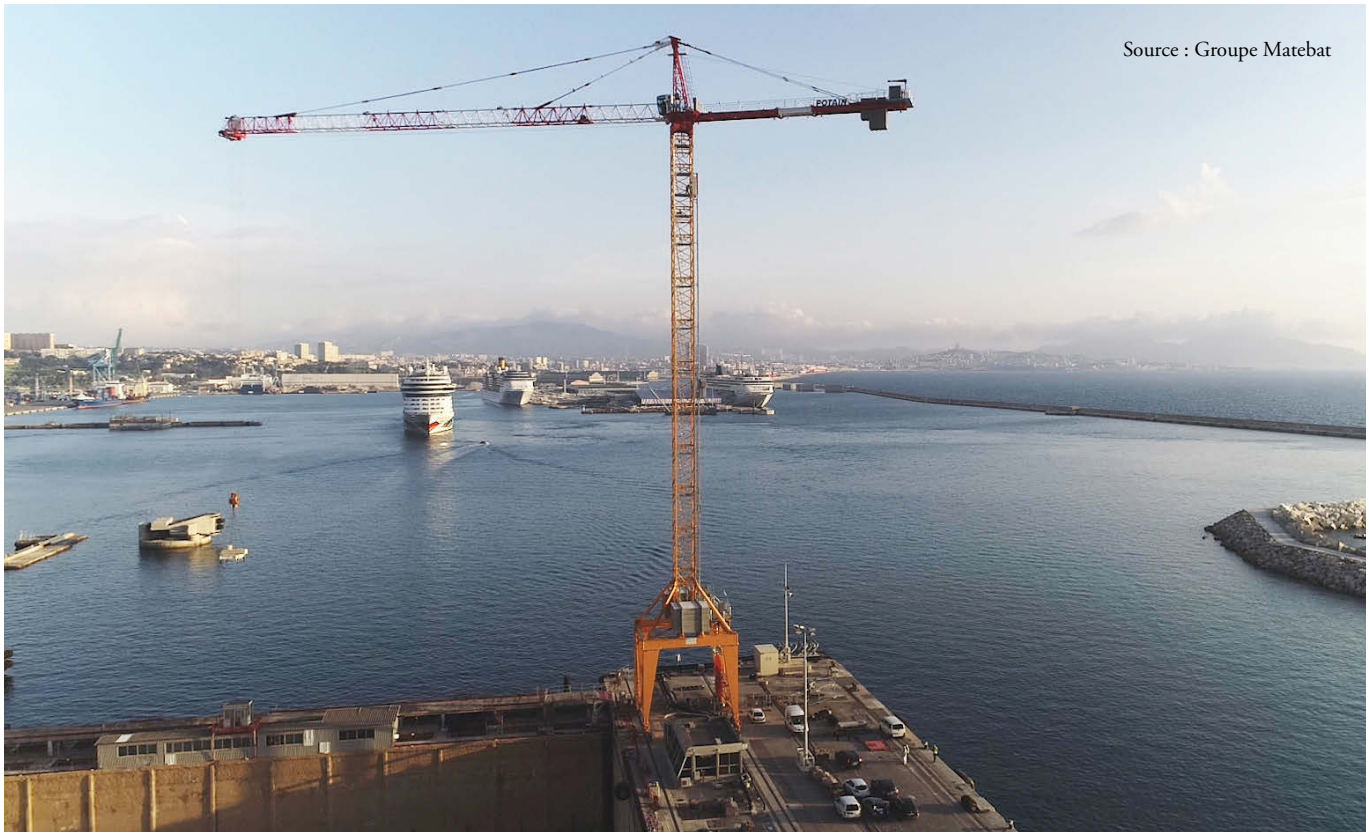
MD 1100 and MDT 368 - Vladivostok (Russia)

The Vladivostok bridge is one of the most prestigious bridge project realized with Potain special application cranes. The bridge is located in the bay of Vladivostok. The company Mostovik based in Omsk (Siberia) has a great experience in the bridge construction and has chosen Potain amongst the other suppliers.
The project is realized in 7 stages with 2 MD 1100 and MDT 368. The major advantage in using MDT 368 Topless is to optimize the hook heights of both cranes and assure collision free overflying.
The strong Potain mast elements assure world class free standing heights of 68,8 m above anchorage and strongly improved the job site productivity. The proximity of both cranes tremendously decreased the dismantling time of the MDT 368 by using the MD 1100.

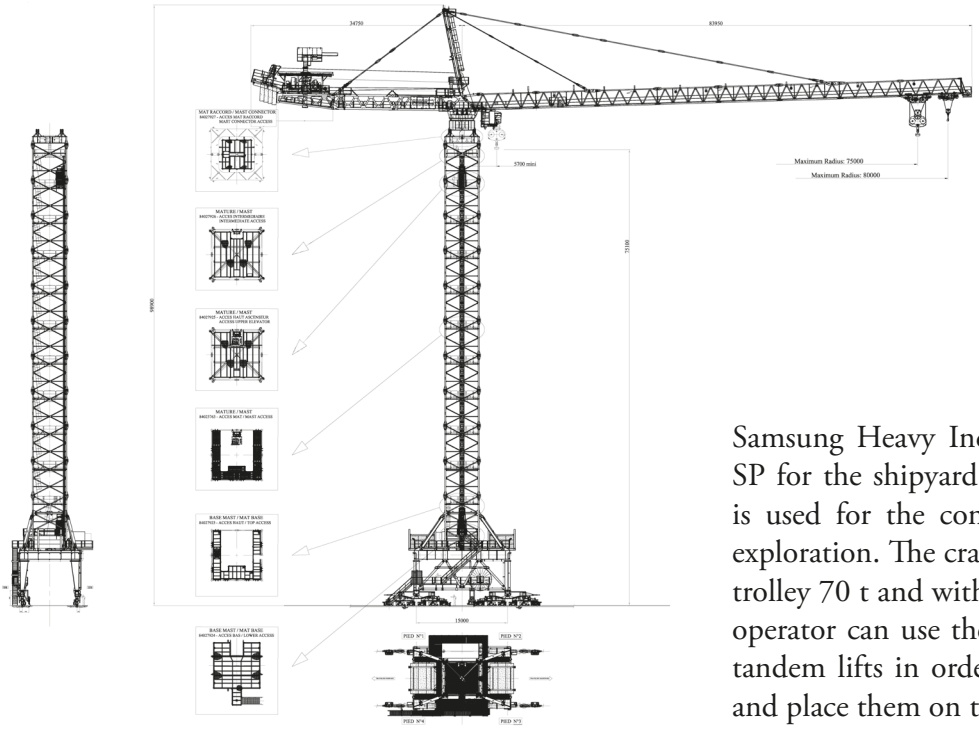
Cranes specifications

- MD 1100: Max height 335 m, jib radius 60 m, max capacity 50 t
- MDT 368: Max height 324 m, jib radius 40 m, max capacity 16 t

Shipyard applications



MD 3200 SP - Samsung (Nigeria)



Samsung Heavy Industries ordered a MD 3200 SP for the shipyard of Ladol, Nigeria. The crane is used for the construction of ships for Petrol exploration. The crane is equipped with one main trolley 70 t and with a secondary trolley 25 t. The operator can use them separately or can perform tandem lifts in order to flip prefabricated blocks and place them on the ship under construction.

The crane is mounted on a travelling portal equipped with six bogies per corner powered and controlled by means of frequency converters. The portal clearance is six meters and rail span nine meters. Due to the corrosive environment, the crane is delivered with complete salt-water protection: weldments C5M-M paint system according to ISO12944, stainless steel electrical cabinets. To help the crane operator, a camera is installed on each trolley. Access to the cab can be done using operator lift on all the mast length.

Crane specifications

- MD 3200 SP for tandem lift
- Main hoist 70 t / 35 t at 70 m (4 falls / 6 falls)
- Secondary hoist 25 t / 25 t at 80 m (2 falls / 4 falls)
- Tandem lift 50 t at 55 m
- HuH 75 m on travelling portal equipped with 6 bogies / corner

MDN 2200 - Samsung (Korea)

The Samsung shipyard cranes MDN 2200 are used to lift:

- 45 t generators
- 40 t hatch covers
- 5 t waste boxes
- and turn 40 t ship blocks

In order to carry out such application, cranes are equipped with two hoisting winches and two trolleys that can be controlled separately or synchronised for tandem lifts.
Cranes are mounted on rail tracks with width of 7 or 14 m. They are equipped with a portal chassis and a single part-tubular mast connected by traction bolts.
Travelling, slewing, trolleying mechanisms are based on frequency inverter technology. Hoisting winches are equipped with DC motors. The operator cab is equipped with air conditioning ensures comfort, visibility and safety. An operator lift is mounted inside the tubular mast.

Cranes specifications

Crane 1	Hook height 44 m Maximum load 50 t at 39,5 m	Radius 75 m Tip load 23,3 t at 75 m
Crane 2	Hook height 49 m Maximum load 50 t at 38 m	Radius 75 m Tip load 25 t at 75 m
Crane 3	Hook height 48 m Maximum load 50 t at 40 m	Radius 75 m Tip load 25 t at 75 m
Crane 4	Hook height 46 m Maximum load 50 t at 38 m	Radius 75 m Tip load 25 t at 75 m

MD 1100 - Chennaï (India)

L&T Ship building Limited (LTSB), a major indian company chose POTAIN for its Shipyard facility set up at Kattapulli near Chennaï south east of India.
2 MD 1100 cranes were designed according to LTSB special needs, notably in terms of tracks and environment.
They will travel on a 254 m track for the first one and 450 m track for the second one.
Cranes assembly and erection have been carried out by our local Crane Care team.

Cranes specifications

- Capacity 32 t at 33 m
- Maximum radius 60 m (15 t)
- Hook height 46 m
- Travelling on 8 x 8 m chassis, 8 motorized bogies

- Capacity 40 t at 25 m
- Maximum radius 70 m (14 t)
- Hook height 46 m
- Travelling on 10 x 12 m chassis, 8 motorized bogies

MD 1100 - CCB Agotnes (Norway)

CCB (Coast Center Base), a Norwegian company specialized in providing services and supply to the offshore petroleum activities as well as maintenance for riggs and vessels, chose Potain for it's new yard crane at its Agotnes (Bergen) facilities.
An MD 1100 chassis travelling tower crane was designed according to CCB special needs , 90 m jib, customized cab etc.
Due to the area environment (humidity and salty atmosphere), special marine paint (420 µm) has been applied and for the same reason connections parts did undergo special anti-corrosion treatment.
Upper mechanisms have been gathered under shelter making maintenance easier when rough weather.
Hoisting is carried out by the new 270 HP frequency variation winch 40 t capacity.

Crane specifications

- Maximum load 40 t at 17,7 m
- Maximum radius 90 m / Tip load 6 t
- Hook height 63 m
- Travelling on 8 x 8 m chassis /8 motorized bogies

MD 1100 - Dunkerque (France)

The Port Autonome of Dunkerque ordered a MD 1100 for its dry dock repair. The crane is a pure shipyard crane utilizing all up-to-date technologies such as frequency inverter mechanisms, maintenance aid technology, marine protection, etc ... Its main use is to handle boat diesel engines weighing 50 t. The typical lifts are 10 to 15 t. The crane is mounted for life and has a special marine paint of Manitowoc Red with an overall thickness 240 µm thick. The 150 LCC hoist winch is equipped with DC motors and frequency inverters for trolleying and slewing. The operator cab is equipped with air conditioning has global noise protection as well as facilities bringing maximum comfort to the operator. The crane is equipped with a 2/6 falls 50 t trolley. It can lift 16,5 t with 2 falls for small loads.

Crane specifications

- Maximum radius 60 m / Tip load 13,8 t
- Maximum load 50 t at 20,20 m
- Hook height 56,3 m
- Travelling portal base with a foot print of 10,65 m x 10,65 m and a 8 m clearance through the portal. The portal is travelling on 12 bogies (16 frequency variation motors of 5 kW each)

Shipyard specifications

- Travelling range 500 m

MD 1100 - Denul (Belgium)

The crane is equipped with a 8 x 8 m portal that has been adapted to the existing rail track. It is operated trough radio remote control. In this configuration the travelling base is equipped with 16 x 3 kW frequency inverter controlled travelling motors, allowing travelling speeds from 2 to 30 m/min. Due to the heavy duty cycles and life time request, the crane was designed according to the FEM A5 standard. Four bogies per corner (8 wheels) were necessary in order to reduce the maximum reaction on the rail track (22,8 t per wheel).
The crane is equipped with an automatic motorized slewing ring greasing system as well as the Dialog Easy condition monitoring system, to record all the necessary information for the maintenance personnel. Denul decided to replace the old Wolff crane by a new MD 1100 crane, that was especially modified for this project.

Crane specifications

- Hoisting winch 150 LCC: 16,5 t @ 32,4 m/min; 50 t @10,8 m/min equipped with an additional safety brake
- Trolley winch 25 DVF 25
- Slewing motion, frequency variation 2 x 18,5 kW
- Hook height 40,2 m
- Tip load 10,5 t at 70 m
- Special sea border paint with 240 µm

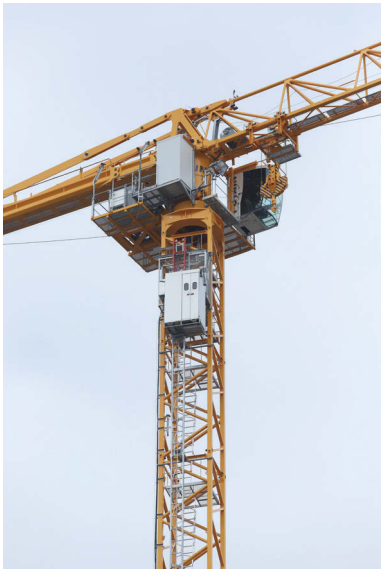
MDTN 462 - Chantiers de l'Atlantique (France)

The previously Alstom Marine division - Chantiers de l'Atlantique company ordered a MDT crane with a special 20 t capacity to work under a giant overhead travelling crane. The use of the topless technology enables maximum possible height under hook.
A permanent operator lift is installed inside the mast, with a maximum capacity of 300 kg, and provides easy access to the operator cab.
The crane upper works is fitted with access platforms designed for optimum safety during maintenance.
Travelling, slewing, trolleying mechanisms are based on frequency inverter technology. The hoisting winch is equipped with a DC motor. The operator cab is fitted with air-conditioner and sanitary WC.

Crane specifications

- Radius 50 m, tip load 8,7 t and option to extend to 10 t
- Maximum load 20 t at 24,7 m
- Hook height 47,6 m
- Travelling portal on a 55 m long track
- Tubular mast

MDT 389 - Chantiers de l'Atlantique (France)



Chantiers de l'Atlantique added a MDT 389 L12 on basin C to increase the productivity of the manufacture of large cruise ships. To protect the crane from the effects of salt water and the harsh environment close to the sea, the crane was delivered with a high durability paint system with metallization.

The MDT 389 L12 is installed on a travelling system with 3 bogies per corner. Hoisting, slewing, trolleying and travelling mechanisms are equipped with frequency variation technology providing smooth control of crane movements. Last generation hoisting winch, 75 HPL™ 30 with emergency brake on the drum, has also been installed.

A permanent operator lift is installed outside of the mast to provide easy access to the operator cab. A Water Closet is also installed close to the operator cab. Chantiers de l'Atlantique has requested an anti-collision system between the two travelling cranes installed on the track. A complete lighting system with projectors installed on the jib and on the portal allows the cranes to operate at all times of the day.

Crane specifications

- Maximum load 12 t at 24,5 m
- Radius 70 m / Tip load 3,4 t
- Hook Height 68,8 m
- Travelling portal 8 x 8 m (clearance 6 m) on a 270 m track
- High durability paint system including metallization

MD 569 - Chantier naval de Marseille (France)


Source : Groupe Matebat

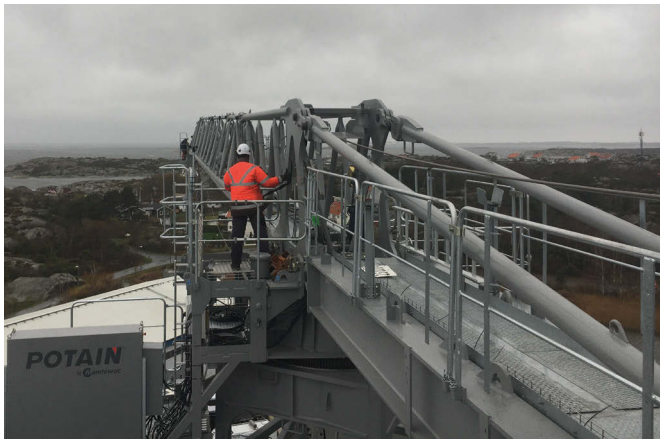
Drydock n° 10 of the Port of Marseille is used by Chantier Naval de Marseille to perform maintenance on large ships. In addition to the existing 150 t Caillard, a MD 569 has been installed on the 535 m long track of the dock. The crane is equipped with a portal with one of the highest clearances ever designed. It is also 10 m wide to fit with the existing track on the dock. The crane will be able to travel extensively along the track thanks to the 3 bogies installed per corner.

The permanent external operator lift and crane components are equipped with extra protection due to seaside conditions. Paint range is classified as C5-M according to ISO 12944. Hoisting, slewing, trolleying and travelling mechanisms are equipped with frequency variation technology providing smooth control of crane movements. A 100 LVF 40 winch has been specially installed on the crane.

Crane specifications

- Maximum load 16 t at 33,9 m
- Radius 60 m / Tip load 8 t
- Hook Height 67,9 m
- Travelling portal 10 x 10 m (clearance 10 m) on a 535 m track

MDT 489 - Volvo Penta Torslanda (Sweden)



Volvo Penta ordered to the Potain local dealer Lambertsson one unit of the new model MDT 489 for the shipyard of Torslanda in Sweden.

The provided crane has been customized to be exclusively operated by means of a radio remote controller (removal of the cabin).

The applied painting system has a High durability in a very highly corrosive environment (C5 H according to ISO 12944:2018).
Furthermore, all accessories are suitable for the marine application (stainless steel electrical cabinet, special anticorrosion treatment for pins, etc.)

Crane specifications

- Maximum load: 25 t
- Tip load: 14 t at 40 m jib radius
- HuH: 25 m

MDT 189 - CMN (Saudi Arabia)

Constructions Mécaniques de Normandie ordered four MDT 189 to be installed on 2 floating docks intended to the Saudi Arabia naval forces.
Cranes are mounted on fixing angles directly welded on the floating dock deck.
They are designed to operate under the following conditions:

- Max ambient temperature: +50°C
- Max roll angle and period: 2° / 7 s
- Max pitch angle and period: 1° / 5 s

The applied painting system has a Medium durability in a very highly corrosive environment (C5 M according to ISO 12944:2018). Furthermore, all accessories are suitable for the marine application (stainless steel electrical cabinet, special anticorrosion treatment for pins, etc.).

Crane specifications

- Maximum load 8 t
- Maximum radius 30 m
- HuH: 15 m for 2 cranes - 10 m for the 2 others

Industry applications

MD 1100 - Jaypee Himachal (India)

Jaiprakash construction company based in Delhi India acquired 5 units of MD 1100 for the construction of a large cement plant Jaypee Himachal.
2 of them were travelling until they reached the free standing height (86,7 m) and then they were anchored to the factory structure up to 144,5 m. They were equipped with an air conditioning operator cab as well as indicators and anemometer.

Cranes specifications

Cranes 1 and 2	Cranes 3, 4 and 5
Travelling on 8 x 8 m chassis	Travelling on 8 x 8 m chassis
Hook height 86,7 m	Hook height 75 m
Radius 60 m / Tip load 18 t	Radius 80 m / Tip load 10 t
Maximum load 40 t	Maximum load 40 t

MDN 650 - Steel stockyard (France)

Baudin Chateauneuf company is a metallurgical factory specialized in manufacturing welded assembled steel girders used for the construction of bridge floors.
This MDN 650 crane has been designed for a long lasting lifetime required for high performance industrial tools.
The tubular monoblock mast was made in only one piece without intermediate connection.
The 150 LCC hoisting winch combined with a trolley with 6 fall rope reeving ensures smoothness and precision.
Trolleying, travelling and slewing mechanisms with frequency inverter technology ensure perfect progressive acceleration and deceleration.
The modern, ergonomic, silent and air-conditioned operator cab is equipped with an on-board computer and Top tracing system (anti collision system).

Crane specifications

- Radius 60 m / Tip load 5,8 t
- 150 rail track
- 500 000 working cycles and 16 h/day
- Maximum load 32 t

MDT 218 & MD 485 B - Sakalhin (Russia)

This project consists in the construction of an off shore platform in a drydock near Vladivostok (Eastern Russia). The yard is equipped with 5 cranes : 1 MDT 218 on a travelling chassis, 3 MD 485 B on fixing angles and 1 MD 485 B on chassis.
Cranes are designed to match the particular seismic conditions of the job site with potential horizontal acceleration of 0,1g.

Cranes specifications

	Base	Hook height	Radius	Capacity
MD 485 B	Fixing angles	70,5 m	70 m	20 t
MD 485 B	Fixing angles	83,9 m	65 m	20 t
MD 485 B	Chassis	85,8 m	65 m	20 t
MD 485 B	Fixing angles	83,9 m	65 m	20 t
MDT 218	Travelling	26,9 m	50 m	10 t

- Hoisting winch 100 LVF 50 Optima (75 kW), frequency variation technology with service brake and safety brake
- 20 t at 18 m/min and 10 t at 36 m/min
- Trolley winch 10 DVF 10 (7,4 kW AC motor) frequency variation 20 t from 0 to 80 m/min
- Slewing mechanism RVF 183 Optima (3 x 9 kW AC motors) frequency variation technology
- Rpm 0 to 0,8
- Motorized greasing of turntable (inside bearing and toothing)

MDT 349 - Pigeon Prefa Combourg (France)

Pigeon Prefa ordered an MDT 349 to replace an existing crane at their precast factory of Combourg.

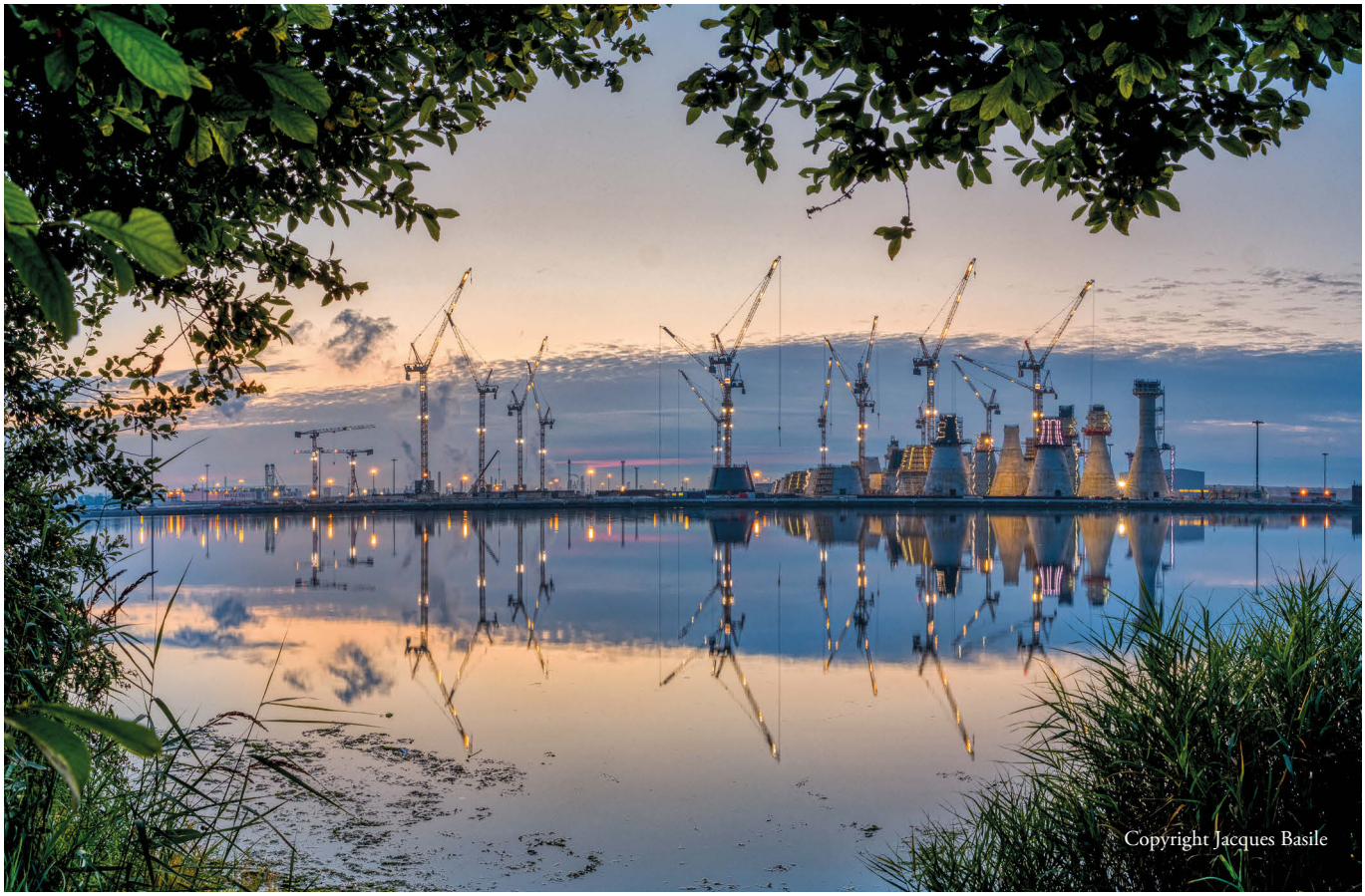
The provided crane is mounted on a 6 x 6 m travelling chassis to fully cover the storage area of the factory.

The travelling mechanism is equipped with 2 bogies per corner each fitted with 2 diameters 430 mm wheels to suit the frequent utilization.

Crane specifications

- Maximum load: 16 t
- Tip load: 6 t at 70 m jib radius
- HuH: 27 m
- Cable reel suitable for the 80 m track length

Power plant applications



MD 3200 - Chernobyl (Ukraine)

The MD 3200 was used to reinforce the collapsed nuclear power plant before complete recovery with the new shelter «sarcophage».
The crane was fully radio remote controlled. The crane driver operated from a ground level anti radiation air conditioning shelter equipped with all facilities such as camera screens, load moment and radius and height indicators, air conditioning shelter.
The Frequency variation control travelling equipment was made of 16 x 4 kW motors and automatic hydraulic rail brakes.
The 250 LCC 133 Hoisting winch, equipped with a service and security brake, can work with a 6/4 falls trolley-hook block device. All electric and electronic components were in compliance with the ISO radiation standard and located in an anti-radiation, air conditioning shelter.

Crane specifications

- Hook height 72,5 m
- 15 x 15 m chassis
- 15 m rail-track / 100 m long
- Radius 70 m / Tip load 38,7 t
- Maximum load 80 t at 37 m

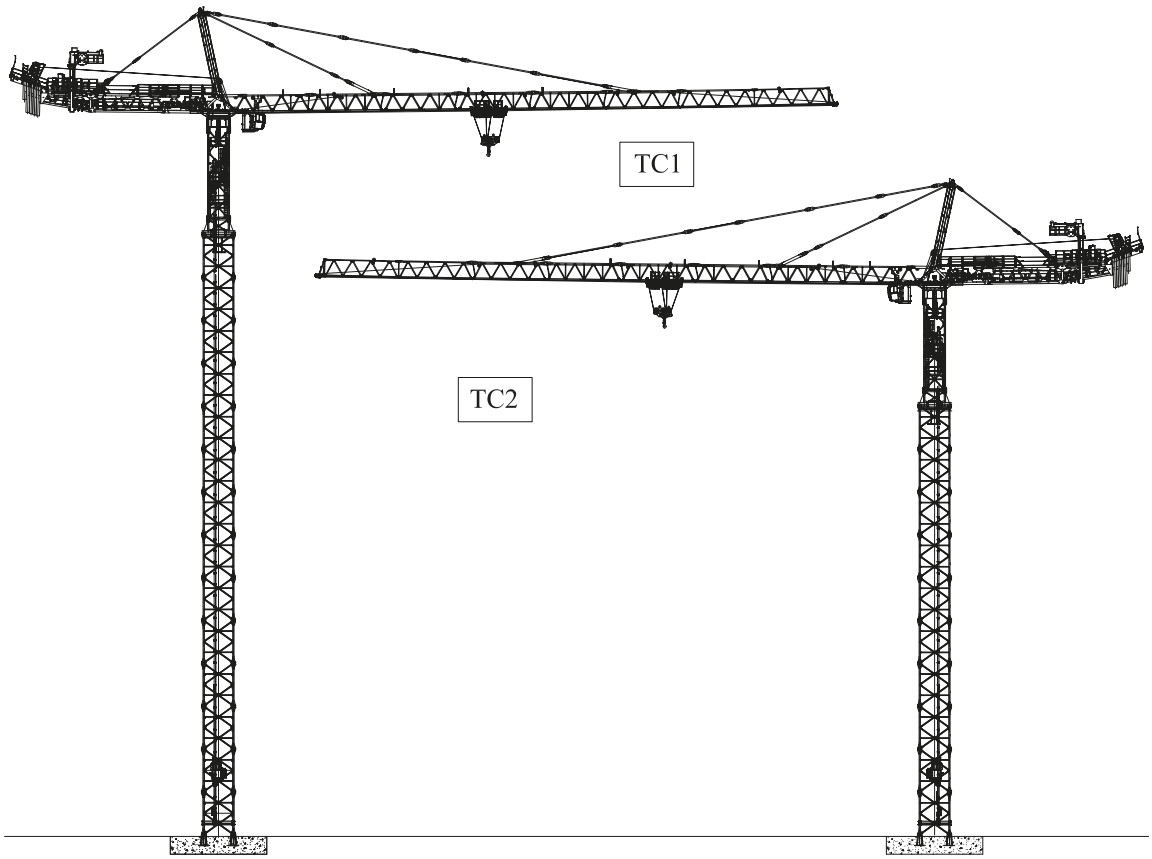
MD 3200 - Flamanville (France)

Bouygues company purchased an MD 3200 to build the EPR nuclear power plant in Flamanville.
The liner was made of 40 t curved steel plates welded on-site. Other general equipment were lifted by the crane.
The MD 3200 overflew the fleet of various types of tower cranes, mainly Topless, all calculated in accordance with the strong wind specifications of the French northwest coast (more than 200 km/h) as well as the proximity of the cliff.
The crane was equipped with a rack and pinion lift located inside the mast structure.

Crane specifications

- 26,6 t at 80 m
- 40 t at 60 m
- 64 t at 40,5 m
- Hook height 89,44 m
- 15 x 15 m chassis / 16 motorized bogies

MD 1600 - Bigge / Bechtel (USA)



Bigge placed an order for their customer Bechtel two MD 1600 units for a major construction jobsite in United States.

Both cranes were delivered in 40 t version with 1C/2C trolley. The cranes were erected on fixing angles at 68,5 m and 91,6 m according to United States wind code regulations. With the 80 m jib length, cranes were able to lift the maximum load of 40 t at a radius of 39,2 m and the tip load was 19,2 t.
Both cranes are equipped with a UL/CSA TCL elevator.

Cranes specifications

MD 1600 - 40 t	
Crane 1	Crane 2
HuH = 91,6 m	HuH = 68,5 m
Maximum load 40 t	
Tip load 19,2 t at 80 m	

MD 1100 - Sosnovyi (Russia)

Tytan 2 company, located in St Petersburg ordered 2 sets of MD 1100 for the construction of the Sosnovyi nuclear power plant. It started in August 2009.
Cranes are equipped with 40 t double trolley and 250 DC hoisting winch. They can lift 20 t up to 46 m/min. The others mechanisms are frequency variation technology.

Cranes specifications

- Fixing angles version
- Hook height 73 m
- Radius 70 m / Tip load 10 t
- Maximum load 40 t
- Vision cab equipped with air conditioning, indicators, anemometer

MR 608 - Fecamp Offshore Wind Farm (France)

The Fecamp Offshore Wind Farm consists of 71 wind turbines installed off the Normandy coast, between 13 and 22 km from the shore.
The gravity-based foundations of the wind turbines were constructed at a yard located in Le Havre, and then transferred by barge to the wind farm location.

Sixteen MR 608 each mounted on a travelling chassis were used for the construction of the foundations.
Cranes were moving on a 10 m span and 370 m long track. Travelling equipment was composed of 2 bogies per corner.
Specific equipment and adaptations of the travelling chassis were required to match the jobsite need.

Crane specifications

- Maximum load: 16 t
- Tip load: 13 t
- Jib radius: 50 m
- Height under hook: 54 m

MDT 219 - Cize Bolozon (France)

Électricité de France (EDF) has purchased a MDT 219 J10 to replace a crane installed on the Cize Bolozon Dam in 1929. The crane will be used to perform the maintenance on the dam, and more specifically on the floodgates. The heaviest load is the cofferdams at 8,4 t, however with water effects on the cofferdam, the load will be closer to 10 t. Safety coefficients have been considered in order to use the crane for a high-risk application. During the operation, the hook block and the rope can go underwater thanks to a specific maintenance plan.

The crane is installed on a portal which spans the equipment room located at the top of the dam main structure in a very narrow area. It is operated by remote control. A Top Tracing 3 anti-collision system is avoiding the overflight of the high voltage. Paint range is classified C4A NV according to ISO12944. All the equipment of the crane is designed to withstand the very corrosive environment.

Crane specifications

- Maximum load 10 t at 10,2 m
- Radius 25 m / Tip load 3,3 t
- Hook Height 6,7 m – 40 m stroke below rail level
- Travelling portal 4,7 x 4,7 m with 3,4 m clearance

MCT 58 - Sainte-Rose Power Station (La Réunion, France)

Potain and the local dealer GLI (Grues Levages Investissements) faced a major challenge when tasked by energy company EDF (Électricité de France) to replace an old Potain 427 E maintenance crane installed at Sainte-Rose power station on the French overseas department of La Réunion.

Indeed, when the jobsite sits at the top of a hydroelectric dam; which itself sits at the foot of a volcano on a remote island in the middle of the Indian Ocean; and there's no access for vehicles bigger than a small car; the only means is a commercial helicopter for placing your crane.

For this project, the Potain Lift Solutions team ensured every section of the MCT 58 came in at less than 1 t and that the slinging points were optimally positioned for the helicopter lifts. Corrosion-resistant paint and stainless-steel casing for the electrical components were also specified to provide maximum durability in the damp environment on top of the dam.

After manufacturing, the crane was shipped to the GLI yard on La Réunion, where the erection team practiced assembling and disassembling prior to installing it, to be sure of the weight, slinging points and work plan.

The erection of the new MCT 58 was completed in 26 flights, each lasting approximately 15 minutes. Total erection time was around six and a half hours, which GLI spreads over two days.
EDF will operate the crane by radio remote control to help dismantle the old 427 E crane, carry out general maintenance on the 3 t cofferdams and 1 t water intake grid, and support a dam reinforcement project.

Crane specifications

- Maximum load: 3 t at 20,7 m jib radius
- Tip load: 1,96 t at 30 m jib radius
- Height under hook: 19,7 m

High rise building applications

MD 1400 - Madrid (Spain)

The Spanish company REPSOL ordered one MD 1400 and two MDT 302 for the construction of the «REPSOL TOWER» in Madrid. MD 1400 was erected up to 277,3 m with 7 anchorings and was used to lift 36 t at 38 m radius at 250 m height. Additional 20 t steel structures were installed on the top.
Two MDT 302 moved up at the same time as the building grew up thanks to an internal climbing system (only 54 m of HUH necessary). They were used for concrete pouring, construction reinforcement and to lift additional 16 t loads.
The two MDT were dismantled with the MD 1400 and the construction lasted 18 months.

Crane specifications

- Maximum load 40 t
- 36 t at 38 m up to 250 m height
- Hoisting winch 250 LCC 100
- Drum capacity 1100 m

NEW

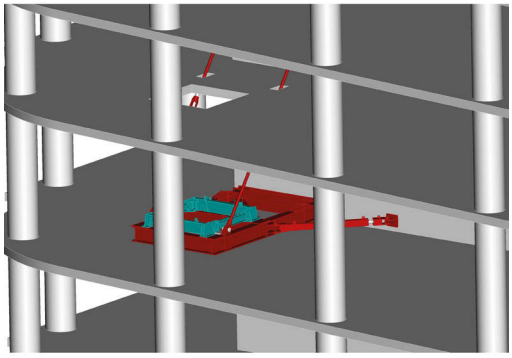
In 2020, the crane was upgraded for the renewal of the Real Madrid Stadium. This upgrading was consisting of the extension of the jib length to 90 m. New jib elements were provided together with a new trolley winch. The slewing mechanism was upgraded to suit the new jib length.

New Crane specifications

- Max load 40 t
- Tip load 6 t at 90 m
- HuH 85,9 m

MD 550 and MDT 222 - Tour Incity Lyon (France)

French contractor Bouygues used two POTAIN tower cranes one MD 550 and one MDT 222 for the construction of Incity Tower which have been one of the most notable skyscraper project in Lyon.
MD 550 crane reached an height under hook of 184,2 m and was erected outside the building using anchorage frames.
MDT 222 crane reached an height under hook of 173 m and was located in the middle of the building using a special internal climbing system: cantilever frames attached to the building concrete core.



Space restriction on the ground motivated this technical solution.
Close collaboration between Lift Solution engineer's team and Bouygues methods has been a key stage of this project.
Manitowoc has provided a complete package including design, manufacturing as well as a full Crane Care support.

Cranes specifications

MD 550 crane
- Maximum radius 60 m
- Tip load 8 t
- Maximum load 16 t
- Final hook height 184,2 m

MDT 222 crane
- Radius 30 m
- Tip load 8,5 t
- Maximum load 12 t
- Final hook height 173 m

MR 418 - Landmark 81 Tower (Vietnam)


Source : Coteccons

Landmark 81 Tower is the tallest building in Vietnam with a height of 460 m. Potain dealer Minh Chi Co erected two units MR 418 type cranes in October 2016 on the project for customer Coteccons. 81st floor has been reached in February 2018.

Both cranes are climbing inside the core of the tower. The strong B850 equipment allows a tower height of 70 m with 50 m jib. The cranes are equipped with a special hoist 270 LVF to work up to 440 m height jib pivot two falls with 18-ton maximum load. One crane stopped at floor 60, and was dismantled by the second one. The second crane pursues on consoles outside the core up to 81st floor and will install the 60 m high mast on top of the tower.


Source : Coteccons

Crane specifications

- Radius: 50 m
- Tip load: 7,9 t
- Max load: 18 t
- Hoist: special 270 LVF 120 with 950 m capacity for 18 t max load
- Climbing device: B850 with KMT 850.10A and KR 849A mast

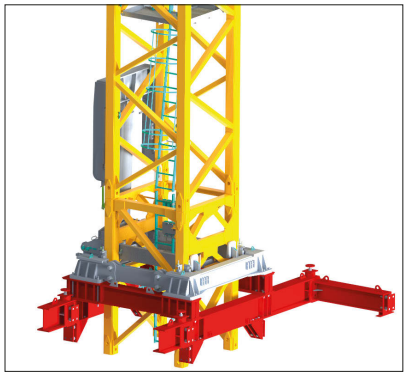
MD 509 - Sky Tower Oostende (Belgium)

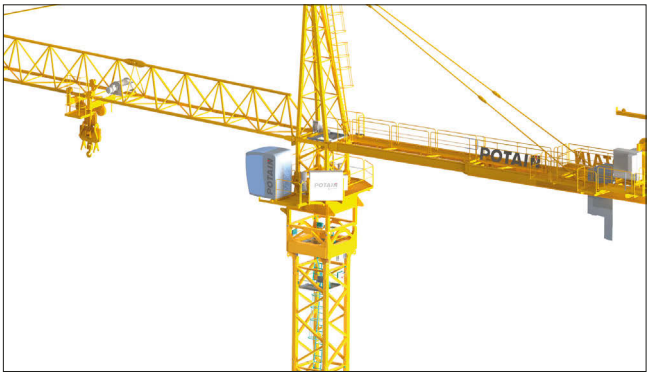
Potain dealer Neremat came in 2019 with a very challenging request for his customer Degroote.
They need to build a 100 m high, 40 m wide tower with 20 t precast balcony all around the tower.

One option could have been to use a very large capacity crane outside of the building to reach the 20 t at 50 m radius. But the chosen solution was to install the crane inside the building, in a narrow elevator shaft.

The selected crane was an MD 509. It was mounted on the strong 2 m climbing system (B60R) with specific reinforced masts KMT 650 to fit in the narrow elevator shaft. A transition mast has been developed to mount the 2,45 m pivot on a 2 m mast.

The Potain Lift Solutions team has designed the supporting beams for internal climbing.
It was the first crane over 400 ton meter installed on 2 m mast sections.

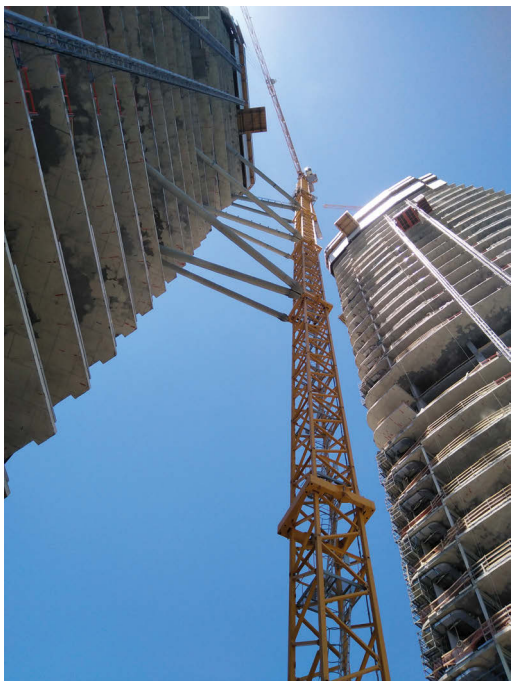


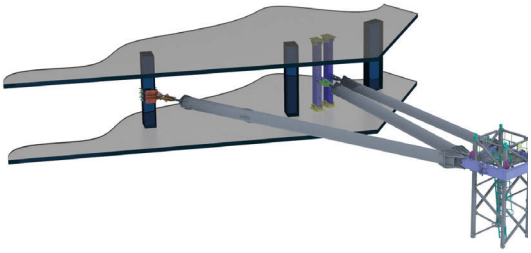


Crane specifications

- MD 509 - 20 t at 25 m - jib 40 m
- Freestanding height: 56,2 m
- Final height: 110 m with D25 wind profile (206 km/h at jib level)

MDT 389 & MDT 269 - Trilogy Limassol Seafront (Cyprus)





Crane TC1 was between the two buildings, TC2 on West tower and TC3 on East tower. TC1 was interfering with TC2 and TC3. The climbing sequence was carefully prepared to avoid any clash between the 3 tower cranes. Potain Lift Solutions team designed the tie bars for the 3 cranes. The longest beam was 18 m long.

Potain Dealer Uniplant provided to Cybarco an MDT 389 L16 and two MDT 269 J12 Tower Cranes for the construction of two 170 m high luxury apartment building on the coast of Limassol.
Potain supported the customer to plan the erection sequence of the 3 cranes.
Cranes were provided with reinforced AK601 frames and some reinforced masts to reduce the number of tie levels and the number of telescoping operations.

Cranes specifications

- TC1: MDT 269 J12 - 50 m jib - 176 m HuH with 6 ties
- TC2: MDT 389 L16 - 45 m jib - 166 m HuH with 5 ties
- TC3: MDT 269 J12 - 45 m jib - 176 m HuH with 5 ties

MISCELLANEOUS

MDT 109 - Mer de glace, Chamonix Mont-Blanc (France)

In order to support the installation of the new Mer de Glace gondola, two MDT 109 have been installed on Mont-Blanc, at 1600 m & 2000 m respectively.

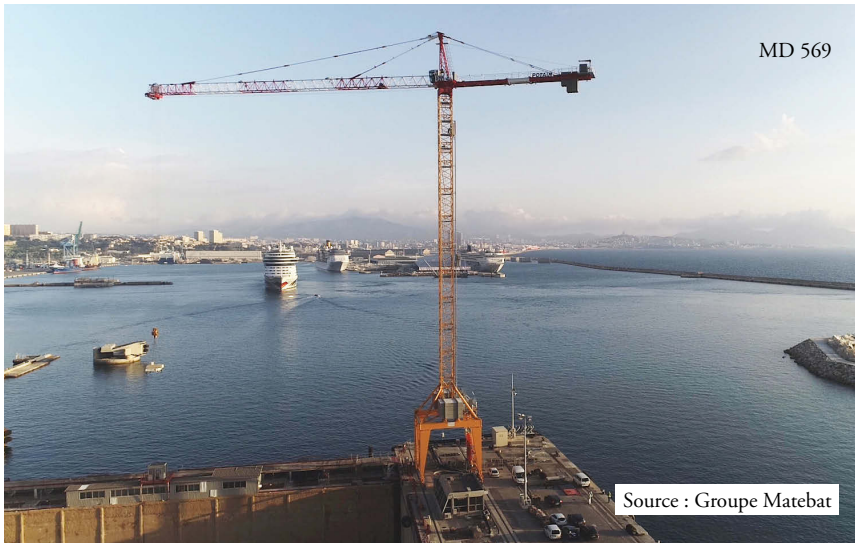
Both cranes were erected by means of helicopters.
The weight of the heavier parcels was limited to 3,6 t because of the altitude. A specific erection procedure has then been established, and several parts have been installed in the air. Specific accessories have been designed for the installation in the air of the slewing pivot and the electrical cabinet.

Crane specifications

- Maximum load: 6 t
- Tip load: 2,85 t
- Jib radius: 35 m
- HuH: 34 m

References list

MDT 222



MD 569

Source : Groupe Matebat

MDT 219

MR 418

Source : Coteccons

Model	Buyer (country)	Application	Features	Year of shipment
MD 3600	SUTONG BRIDGE COMPANY (China)	Sutong bridge (China)	H = 306 m - R = 48,4 m Max load 80 t - Fixing angles	2005
MD 3600	SUTONG BRIDGE COMPANY (China)	Sutong bridge (China)	H = 306 m - R = 48,4 m Max load 80 t - Fixing angles	2005
MD 3600	NANJING 3rd BRIDGE COMPANY (China)	Nanjing bridge (China)	H = 230 m - R = 30 m Max load 160 t - Fixing angles	2003
MD 3600	NANJING 3rd BRIDGE COMPANY (China)	Nanjing bridge (China)	H = 230 m - R = 30 m Max load 160 t - Fixing angles	2003
MD 3200 SP	SAMSUNG HEAVY INDUSTRY (Korea)	Shipyard (Nigeria)	H = 75,1 m - R = 80 m Max load 70 t and 25 t Travelling portal	2015
MD 3200	BOUYGUES COMPANY (France)	Flamanville Nuclear plant (France)	H = 89,44 m - R = 80 m Max load 64 t - Travelling chassis	2007
MD 3200	UTEM (Ukraine)	Chernobyl Nuclear plant (Ukraine)	H = 72,5 m - R = 70 m Max load 80 t - Travelling chassis	2005
MD 2400	VENEZIA SHIPYARD (Italy)	Venezia Shipyard (Italy)	H = 40 m - R = 50 m Max load 80 t - Chassis	2001
MD 2200 Topbelt	SONG DA CORPORATION (Vietnam)	Sesan 3 Dam (Vietnam)	H = 75,6 m - R = 80 m Max load 60 t - Fixing angles	2003
MD 2200 Topbelt	LONGTAN COMPANY (China)	Longtan dam (Guangxi - China)	H = 185,6 m - R = 80 m Max load 60 t - Fixing angles	2003
MD 2200 Topbelt	CHINA RESSOURCES NATIONAL CORP (China)	Three Gorges dam (China)	H = 190 m - R = 80 m Max load 60 t - Fixing angles	1998
MD 2200 Topbelt	CHINA RESSOURCES NATIONAL CORP (China)	Three Gorges dam (China)	H = 190 m - R = 80 m Max load 60 t - Fixing angles	1998
MD 2200	DOGUS (Turkey)	Boyabat Dam (Turkey)	H = 104,5 m - R = 85 m Max load 64 t - Fixing angles	2009
MD 2200	DOGUS (Turkey)	Boyabat Dam (Turkey)	H = 225,7 m - R = 85 m Max load 64 t - Fixing angles	2009
MD 2200	SAMSUNG HEAVY INDUSTRY (Korea)	Shipyard (Korea)	H = 48 m - R = 75 m Max load 50 t and 25 t Travelling portal	2008
MD 2200	SAMSUNG HEAVY INDUSTRY (Korea)	Shipyard (Korea)	H = 46 m - R = 75 m Max load 50 t and 25 t Travelling portal	2008

MD 2200	VERTICON (Australia)	High rise building (Australia)	H = 81,4 m - R = 80 m Max load 64 t - Fixing angles	2006
MD 2200	SAMSUNG HEAVY INDUSTRY (Korea)	Shipyard (Korea)	H = 49 m - R = 75 m Max load 50 & 25 t Travelling portal	2005
MD 2200	LONGTAN Company (China)	Longtan dam (Guangxi - China)	H = 139 m - R = 80 m Max load 60 t - Fixing angles	2003
MD 2200	SONG DA Corporation (Vietnam)	Sesan 3 Dam (Vietnam)	H = 75,6 m - R = 80 m Max load 60 t	2003
MD 2200	SAMSUNG HEAVY INDUSTRY (Korea)	Shipyard (Korea)	H = 44 m - R = 75 m Max load 50 & 25 t Travelling portal	2002
MD 2200	PT INDAH KIAT PULP (Indonesia)	Paper Mill (Indonesia)	H = 93 m - R = 50 m Max load 64 t	1997
MD 2200	DOLINSKAYA Steelworks (Ukraine)	Steelworks (Ukraine)	H = 78 m - R = 80 m Max load 64 t - Chassis	1992
MD 2200	MACHINOIMPORT (Russia)"	Power plant (Lubmin - Germany)	H = 124 m - R = 80 m Max load 50 t - Chassis	1988
MD 2200	TAKRAF (Germany)	Power plant (Germany)	H = 91 m - R = 80 m Max load 64 t - Chassis	1986
MD 2200	TAKRAF (Germany)	Power plant (Germany)	H = 91 m - R = 80 m Max load 64 t - Chassis	1986
MD 1800	LONGTAN Company (China)	Longtan dam (Guangxi - China)	H = 112,5 m - R = 80 m Max load 60 t - Portal	2003
MD 1600 Topbelt	CHOR KARN-CHANG (Thaïland)	Xayaburi dam (Laos)	H = 91,6 m - R = 80 m Max load 64 t - Fixing angles	2012
MD 1600 Topbelt	CHOR KARN-CHANG (Thaïland)	Xayaburi dam (Laos)	H = 91,6 m - R = 80 m Max load 64 t - Fixing angles	2012
MD 1600	BIGGE / BECHTEL (USA)	Power plant (USA)	H = 91,6 m - R = 80 m Max load 40 t - Fixing angles	2017
MD 1600	BIGGE / BECHTEL (USA)	Power plant (USA)	H = 68,5 m - R = 80 m Max load 40 t - Fixing angles	2017
MD 1600	JVACEE (Egypt)	Julius Nyerere dam (Tanzania)	H = 77 m - R = 60 m Max load 64 t - Travelling portal	2021
MD 1400	REPSOL TOWER (Spain)	Building (Spain)	H = 277,3 m - R = 38 m Max load 40 t - Fixing angles	2005
MD 1400	BECHTEL (USA)	Power plant (USA)	H = 73 m - R = 80 m Max load 50 t - Fixing angles	2001
MD 1400	BECHTEL (USA)	Power plant (USA)	H = 73 m - R = 80 m Max load 50 t - Fixing angles	2001
MD 1400	BECHTEL (USA)	Power plant (USA)	H = 73 m - R = 80 m Max load 50 t - Fixing angles	2001

MD 1400	STROJEXPORT (Czechoslovakia)	Power plant (Temelin - Czech Republic)	H = 89 m - R = 50 m Max load 40 t - Fixing angles	1988
MD 1100	NFT (UAE)	Construction (Kuwait)	H = 63,5 m - R = 80 m Max load 40 t - Chassis	2018
MD 1100	NFT (UAE)	Construction (Kuwait)	H = 63,5 m - R = 80 m Max load 40 t - Chassis	2018
MD 1100	NFT (UAE)	Construction (Kuwait)	H = 63,5 m - R = 80 m Max load 40 t - Chassis	2017
MD 1100	NFT (UAE)	Construction (Kuwait)	H = 63,5 m - R = 80 m Max load 40 t - Chassis	2017
MD 1100	NFT (UAE)	Construction (Kuwait)	H = 63,5 m - R = 80 m Max load 40 t - Chassis	2017
MD 1100	NFT (UAE)	Construction (Kuwait)	H = 63,5 m - R = 80 m Max load 40 t - Chassis	2017
MD 1100	NFT (UAE)	Construction (Kuwait)	H = 90,8 m - R = 80 m Max load 40 t - Fixing angles	2017
MD 1100	NFT (UAE)	Construction (Kuwait)	H = 90,8 m - R = 80 m Max load 40 t - Fixing angles	2017
MD 1100	KIL-CHUNJO (Korea)	Construction (Korea)	H = 90,8 m - R = 80 m Max load 40 t - Fixing angles	2016
MD 1100	KIL-CHUNJO (Korea)	Construction (Korea)	H = 90,8 m - R = 80 m Max load 40 t - Fixing angles	2016
MD 1100	OMRAN (UAE)	Construction (UAE)	H = 90,8 m - R = 80 m Max load 40 t - Fixing angles	2016
MD 1100	NFT (UAE)	Power plant (Morocco)	H = 90,8 m - R = 80 m Max load 40 t - Fixing angles	2015
MD 1100	NFT (UAE)	Power plant (Morocco)	H = 90,8 m - R = 80 m Max load 40 t - Fixing angles	2015
MD 1100	CHUNJO (Korea)	Power plant (Malaysia)	H = 113,9 m - R = 80 m Max load 40 t - Fixing angles	2014
MD 1100	CCB AGOTNES (Norway)	Shipyard (Norway)	H = 63 m - R = 90 m Max load 40 t - chassis	2014
MD 1100	NFT (UAE)	Building (Saudi Arabia)	H = 86,6 m - R = 80 m Max load 40 t - Fixing angles	2012
MD 1100	NFT (UAE)	Building (Saudi Arabia)	H = 90,8 m - R = 80 m Max load 40 t - Fixing angles	2012
MD 1100	TITAN (Russia)	Power plant (Russia)	H = 90,8 m -R = 80 m Max load 40 t - Fixing angles	2012
MD 1100	NFT (UAE)	Building (Saudi Arabia)	H = 86,6 m - R = 85 m Max load 40 t - Chassis	2012

MD 1100	NFT (UAE)	Building (Saudi Arabia)	H = 86,6 m - R = 80 m Max load 40 t - Chassis	2011
MD 1100	L & T (India)	Shipyard (India)	H = 46 m - R = 70 m Max load 40t - Chassis 10x12 m	2011
MD 1100	L & T (India)	Shipyard (India)	H = 46 m - R = 60 m Max load 32 t - Chassis	2011
MD 1100	TITAN (Russia)	Power plant (Russia)	H = 73,5 m - R = 80 m Max load 40 t - Fixing angles	2011
MD 1100	PIRRIS (Costa Rica)	Dam (Costa Rica)	H = 108 m - R = 80 m Max load 40 t - Fixing angles	2011
MD 1100	NFT (UAE)	Building (Saudi Arabia)	H = 90,8 m - R = 90 m Max load 40 t - Fixing angles	2010
MD 1100	NFT (UAE)	Building (Saudi Arabia)	H = 90,8 m - R = 80 m Max load 40 t - Fixing angles	2010
MD 1100	NIBM (Netherland)	Erasmus building (Netherland)	H = 79,2 m - R = 50 m Max load 40 t - Fixing angles	2010
MD 1100	NIBM (Netherland)	Erasmus building (Netherland)	H = 56 m - R = 60 m Max load 40 t - Fixing angles	2010
MD 1100	JAYPEE HIMACHAL (India)	Industry (India)	H = 75 m - R = 80 m Max load 40 t - Chassis	2010
MD 1100	JAYPEE HIMACHAL (India)	Industry (India)	H = 75 m - R = 80 m Max load 40 t - Chassis	2010
MD 1100	JAYPEE HIMACHAL (India)	Industry (India)	H = 75 m - R = 80 m Max load 40 t - Chassis	2009
MD 1100	MOSTOVIK (Russia)	Bridge (Russia)	H = 335 m - R = 60 m Max load 50 t - Fixing angles	2009
MD 1100	JAN DENUL (Belgium)	Shipyard (Belgium)	H = 40,2 m - R = 70 m Max load 50 t - Travelling portal	2009
MD 1100	MEDUPI (South Africa)	Power plant (South Africa)	H = 69 m - R = 80 m Max load 32 t - Chassis	2009
MD 1100	DOGUS (Turkey)	Boyabat Dam (Turkey)	H = 137,1 m - R = 60 m Max load 40 t - Fixing angles	2009
MD 1100	DOGUS (Turkey)	Boyabat Dam (Turkey)	H = 120 m - R = 65 m Max load 40 t - Fixing angles	2009
MD 1100	SAMSUNG HEAVY INDUSTRY (Korea)	Shipyard (Rong Cheng - China)	H = 50 m - R = 80 m Max load 32 t - Travelling portal	2009

MD 1100	SAMSUNG HEAVY INDUSTRY (Korea)	Shipyard (Rong Cheng - China)	H = 50 m - R = 80 m Max load 32 t - Travelling portal	2009
MD 1100	HYUNDAI SAMHO (Korea)	Shipyard (Korea)	H = 60 m - R = 80 m Max load 40 t - Chassis	2009
MD 1100	SOSNOVY BOR (Russia)	Power plant (Russia)	H = 73 m - R = 70 m Max load 40 t - Fixing angles	2009
MD 1100	DIGA ALTO CEDRINO (Italy)	Dam (Italy)	H = 80,9 m - R = 80 m Max load 40 t - Chassis	2008
MD 1100	JAYPEE HIMACHAL (India)	Industry (India)	H = 86,7 m - R = 60 m Max load 40 t - Chassis	2008
MD 1100	JAYPEE HIMACHAL (India)	Industry (India)	H = 86,7 m - R = 60 m Max load 40 t - Chassis	2008
MD 1100	MACAU VENEZIAN CASINO (China)	High rise building (China)	H = 73,5 m - R = 50 m Max load 40 t - Fixing angles	2008
MD 1100	CHUNJO (Korea)	Power plant (Korea)	H = 90,8 m - R = 80 m Max load 40 t - Fixing angles	2008
MD 1100	NFT (UAE)	Dubai drydocks (UAE)	H = 69,3 m - R = 80 m Max load 40 t - Chassis	2008
MD 1100	NFT (UAE)	Construction (UAE)	H = 57,8 m - R = 80 m Max load 40 t - Chassis	2008
MD 1100	NFT (UAE)	Construction (UAE)	H = 57,8 m - R = 80 m Max load 40 t - Chassis	2008
MD 1100	NFT (UAE)	Construction (UAE)	H = 57,8 m - R = 80 m Max load 40 t - Chassis	2007
MD 1100	NFT (UAE)	Construction (UAE)	H = 57,8 m - R = 80 m Max load 40 t - Chassis	2007
MD 1100	NFT (UAE)	Dubai drydock (UAE)	H = 69,3 m - R = 80 m Max load 40 t - Chassis	2007
MD 1100	DUNKERQUE (France)	Shipyard (France)	H = 56,3 m - R =60 m Max load 50 t - Travelling portal	2007
MD 1100	GEZHOUBA (China)	Dam (Qingshuitang - China)	H = 86,7 m - R = 80 m Max load 40 t - Chassis	2007
MD 1100	GEZHOUBA (China)	Dam (Qingshuitang - China)	H = 86,7 m - R = 80 m Max load 40 t - Chassis	2006
MD 1000	SHIRKE (India)	Power plant (Gandhinagar - India)	H = 94 m - R = 50 m Max load 50 t - Chassis	1986
MD 1000	KUTLUTAS (Turkey)	Power plant (Sivas Kangal - Turkey)	H = 137 m - R = 80 m Max load 64 t - Chassis	1984
MD 1000	SHIRKE (India)	Power plant (India)	H = 94 m - R = 50 m Max load 50 t - Chassis	1984

MD 1000	NORMAN OLSEN (Norway)	Shipyard (Norway)	H = 31 m - R = 50 m Max load 64 t - Portal	1981
MD 1000	MIN Nis (Yugoslavia)	Power plant (Obrenovac - Serbia)	H = 149 m - R = 50 m Max load 50 t	1980
MD 1000	3 MAJ (Yugoslavia)	Shipyard (Rijeka - Croatia)	H = 40 m - R = 60 m Max load 50 t	1980
MD 1000	PSB (USSR)	Power plant (Dukovany - Czech Republic)	H = 73 m - R = 50 m Max load 30 t - Chassis	1979
MD 1000	PSB (USSR)	Power plant (Dukovany - Czech Republic)	H = 73 m - R = 50 m Max load 30 t - Chassis	1979
MD 1000	PSB (USSR)	Power plant (Dukovany - Czech Republic)	H = 73 m - R = 50 m Max load 30 t - Chassis	1979
MD 1000	PSB (USSR)	Power plant (Dukovany - Czech Republic)	H = 73 m - R = 50 m Max load 30 t - Chassis	1979
MD 1000	HYDROSTAV (Czechoslovakia)	Power Plant (Bohunice - Slovakia)	H = 73 m - R = 50 m Max load 30 t - Chassis	1978
MD 1000	HYDROSTAV (Czechoslovakia)	Power Plant (Bohunice - Slovakia)	H = 73 m - R = 50 m Max load 30 t - Chassis	1978
MD 900 B	WARUNA (Indonesia)	Shipyard (Indonesia)	H = 44,6 m - R = 60 m Max load 50 t - Travelling portal	2006
MD 900 B	SONG DA CORPORATION (Vietnam)	Sesan 3 Dam (Vietnam)	H = 60,5 m - R = 60 m Max load 50 t - Fixing angles	2004
MD 900 B	SONG DA CORPORATION (Vietnam)	Sesan 3 Dam (Vietnam)	H = 60,5 m - R = 60 m Max load 50 t - Fixing angles	2004
MD 900 B	SONG DA CORPORATION (Vietnam)	Sesan 3 Dam (Vietnam)	H = 60,5 m - R = 60 m Max load 50 t - Fixing angles	2004
MD 900 B	SONG DA CORPORATION (Vietnam)	Sesan 3 Dam (Vietnam)	H = 60,5 m - R = 60 m Max load 50 t - Fixing angles	2004
MD 900	BARCELONE CITY (Spain)	Construction (Spain)	H = 30 m - R = 60 m Max load 25 t - Chassis	2003
MD 900	MINISTRY OF IRRIGATION (Irak)	Construction (Irak)	H= 203 m - R= 70 m Max load 20 t - Chassis	2002
MD 900	MINISTRY OF IRRIGATION (Irak)	Construction (Irak)	H= 203 m - R= 70 m Max load 20 t - Chassis	2002
MD 900	SAMSUNG HEAVY INDUSTRY (Korea)	Shipyard (Korea)	H = 43 m - R = 70 m Max load 20 t - Portal	1994
MD 900	SAMSUNG HEAVY INDUSTRY (Korea)	Shipyard (Korea)	H = 43 m - R = 70 m Max load 20 t - Portal"	1994

MD 900	VODNI STAVBY (Czechoslovakia)	Power plant (Teme-lin - Czech Republic)	H = 63 m - R = 50 m Max load 50 t - Chassis	1989
MD 900	VODNI STAVBY (Czechoslovakia)	Power plant (Temelin - Czech Republic)	H = 80 m - R = 50 m Max load 50 t - Chassis	1989
MD 900	ASTALDI (Italy)	Dam (Italy)	H = 40 m - R = 70 m Max load 25 t	1988
MD 900	STATE MACHINERY (Irak)	Badush Dam (Irak)	H = 105 m - R = 70 m Max load 32 t - Chassis	1987
MD 900	STATE MACHINERY (Irak)	Badush Dam (Irak)	H = 105 m - R = 70 m Max load 32 t - Chassis	1987
MD 900	PSB (USSR)	Krivoy Rog Iron Ore Basin (Ukraine)	H = 63 m - R = 70 m Max load 32 t - Chassis	1987
MD 900	PSB (USSR)	Krivoy Rog Iron Ore Basin (Ukraine)	H = 63 m - R = 70 m Max load 32 t - Chassis	1987
MD 900	PSB (USSR)	Krivoy Rog Iron Ore Basin (Ukraine)	H = 63 m - R = 70 m Max load 32 t - Chassis	1987
MD 900	PSB (USSR)	Krivoy Rog Iron Ore Basin (Ukraine)	H = 63 m - R = 70 m Max load 32 t - Chassis	1987
MD 900	PSB (USSR)	Krivoy Rog Iron Ore Basin (Ukraine)	H = 63 m - R = 70 m Max load 32 t - Chassis	1987
MD 900	PSB (USSR)	Krivoy Rog Iron Ore Basin (Ukraine)	H = 63 m - R = 70 m Max load 32 t - Chassis	1987
MD 900	PSB (USSR)	Krivoy Rog Iron Ore Basin (Ukraine)	H = 63 m - R = 70 m Max load 32 t - Chassis	1987
MD 900	VODNI STAVBY (Czechoslovakia)	Power plant (Temelin - Czech Republic)	H = 51 m - R = 50 m Max load 50 t - Chassis	1987
MD 900	PSB (USSR)	Power plant (Temelin - Czech Republic)	H = 64 m - R = 70 m Max load 32 t - Chassis	1987

MD 900	HYDROSTAV (Czechoslovakia)	Power plant (Mochovce - Slovakia)	H = 70 m - R = 60 m Max load 32 t - Chassis	1986
MD 900	HYDROSTAV (Czechoslovakia)	Power plant (Mochovce - Slovakia)	H = 70 m - R = 60 m Max load 32 t - Chassis	1986
MD 900	HYDROSTAV (Czechoslovakia)	Power plant (Mochovce - Slovakia)	H = 70 m - R = 60 m Max load 32 t - Chassis	1985
MD 830	BNFL (GB)	Thorp Nuclear Fuel (GB)	H = 60 m - R = 55 m Max load 25 t	1986
MD 830	BNFL (GB)	Thorp Nuclear Fuel (GB)	H = 60 m - R = 55 m Max load 25 t	1986
MD 650	TOCOMA (Venezuela)	Dam (Venezuela)	H = 68 - R = 70 m Max load 40 t - Travelling chassis	2008
MD 650	YEYWA (Myanmar)	Dam (Myanmar)	H = 67 m - R = 80 m Max load 25 t - Fixing angles	2007
MD 650	ALL ERECTION (USA)	Construction (USA)	R = 80 m Max load 40 t	2001
MDN 650	BAUDIN CHATEAU-NEUF (France)	Steel stockyard (France)	H = 21 m - R = 60 m Max load 32 t - Travelling chassis	2000
MR 605 B	NOVARKA (Ukraine)	Chernobyl Nuclear plant (Ukraine)	H = 57,5 m - R = 60 m Max load 16 t - Travelling chassis	2011
MR 605 B	NOVARKA (Ukraine)	Chernobyl Nuclear plant (Ukraine)	H = 57,5 m - R = 60 m Max load 16 t - Travelling chassis	2011
MR 605 B	NOVARKA (Ukraine)	Chernobyl Nuclear plant (Ukraine)	H = 57,5 m - R = 60 m Max load 16 t - Travelling chassis	2011
MR 605 B	NOVARKA (Ukraine)	Chernobyl Nuclear plant (Ukraine)	H = 57,5 m - R = 60 m Max load 16 t - Travelling chassis	2011
MD 600	SEP GEFYRA (Greece)	Rion Antirion bridge (Greece)	R = 70 m Max load 20 t	2000
MD 600	SEP GEFYRA (Greece)	Rion Antirion bridge (Greece)	R = 70 m Max load 20 t	2000
MD 600	SEP GEFYRA (Greece)	Rion Antirion bridge (Greece)	R = 70 m Max load 20 t	1999
MD 600	SEP GEFYRA (Greece)	Rion Antirion bridge (Greece)	R = 70 m Max load 20 t	1999

MD 600	MACHINE SAZI ARAK (Iran)	Dam (Iran)	R = 70 m Max load 20 t	1998
MD 600	MACHINE SAZI ARAK (Iran)	Dam (Iran)	R = 70 m Max load 20 t	1998
MD 600	MACHINE SAZI ARAK (Iran)	Dam (Iran)	R = 70 m Max load 20 t	1998
MD 600	MACHINE SAZI ARAK (Iran)	Dam (Iran)	R = 70 m Max load 20 t	1998
MD 600	MACHINE SAZI ARAK (Iran)	Dam (Iran)	R = 70 m Max load 20 t	1998
MD 600	NEREMAT (Singapour)	Construction (Singapore)	R = 70 m Max load 20 t	1998
MD 600	HOUSING FOUNDATION (Iran)	Construction (Iran)	R = 70 m Max load 20 t	1998
MD 600	BOUYGUES SA (France)	Construction (France)	R = 70 m Max load 20 t	1998
MD 569	CHANTIER NAVAL DE MARSEILLE (France)	Shipyard (France)	H = 67,9 m - R = 60 m Max load 16 t - Travelling portal	2018
MCT 565	JVACEE (Egypt)	Julius Nyerere dam (Tanzania)	H = 67 m - R = 60 m Max load 20 t - Travelling portal	2020
MD 560 A	RIO ORINOCO (Venezuela)	Bridge (Venezuela)	H = 147,8 m - R = 40 m Max load 40 t - Fixing angles	2009
MD 550	BOUYGUES SA (France)	Incity Tower Lyon (France)	H = 184,2 m - R = 60 m Max load 16 t - Fixing angles	2014
MD 509	NEREMAT DEGROOTE (Belgium)	Sky Tower - Oostende (Belgium)	H = 56,2/110 m - R = 40 m Max load 20 t - Internal climbing	2019
MDT 489	LAMBERTSSON VOLVO PENTA (Sweden)	Shipyard (Sweden)	H = 25 m - R = 40 m Max load 25 t - Fixing angles	2021
MD 485 B	AKER SOLUTIONS (Russia)	Sakhalin Oil industry (Russia)	H = 83,9 m - R = 65 m Max load 20 t - Fixing angles	2010
MD 485 B	AKER SOLUTIONS (Russia)	Sakhalin Oil industry (Russia)	H = 84,9 m - R = 65 m Max load 20 t - Chassis	2010
MD 485 B	AKER SOLUTIONS (Russia)	Sakhalin Oil industry (Russia)	H = 70,5 m - R = 70 m Max load 20 t - Fixing angles	2010
MD 485 B	AKER SOLUTIONS (Russia)	Sakhalin Oil industry (Russia)	H = 83,9 m - R = 65 m Max load 20 t - Fixing angles	2010
MD 485	MEDUPI (South Africa)	Power plant (South Africa)	H = 33,72 m - R = 40 m Max load 25 t - Travelling chassis	2009

MDTN 462	CHANTIERS DE L'ATLANTIQUE (France)	Shipyard (France)	H = 47,6 m - R = 50 m Max load 20 t - Travelling portal	2006
MR 418	COTECCONS (Vietnam)	Landmark 81 Tower (Vietnam)	H = 430 m - R = 50 m Max load 18t - Internal climbing	2016
MR 418	COTECCONS (Vietnam)	Landmark 81 Tower (Vietnam)	H = 300 m - R = 50 m Max load 18t - Internal climbing	2016
MDT 389	CHANTIERS DE L'ATLANTIQUE (France)	Shipyard (France)	H= 68,8 m - R = 70 m Max load 12 t - Travelling portal	2018
MDT 368	MOSTOVIK (Russia)	Bridge (Russia)	H = 324 m - R = 40 m Max load 16 t - Fixing angles	2009
MD 365 B	SAMSUNG HEAVY INDUSTRY (Korea)	Shipyard (Korea)	H = 104,9 m - R = 70 m Max load 16 t - Static chassis	2011
MD 365 B	AKERYARDS (France)	Shipyard (France)	H= 65,6 m - R = 60 m Max load 16 t - Travelling portal	2008
MDT 349	PIGEON PREFA (France)	Industrial (France)	H = 27 m - R = 70 m Max load 16 t - Travelling chassis	2020
MDT 222	BOUYGUES SA (France)	Incity Tower Lyon (France)	H = 173 m - R = 30 m Max load 12t -Internal Climbing	2014
MDT 219	BAUDIN-CHATEAUNEUF EDF (France)	Cize-Bolozon dam maintenance (France)	H = 6,75 m - R = 25 m Max load 10 t - Travelling portal	2018
MDT 189	CONSTRUCTION MECANIQUE DE NORMANDIE (France)	Floating docks (Saudi Arabia)	H = 15 m - R = 30 m Max load 8 t - Fixing angles	2018
MDT 189	CONSTRUCTION MECANIQUE DE NORMANDIE (France)	Floating docks (Saudi Arabia)	H = 10 m - R = 30 m Max load 8 t - Fixing angles	2018
MDT 189	CONSTRUCTION MECANIQUE DE NORMANDIE (France)	Floating docks (Saudi Arabia)	H = 15 m - R = 30 m Max load 8 t - Fixing angles	2018
MDT 189	CONSTRUCTION MECANIQUE DE NORMANDIE (France)	Floating docks (Saudi Arabia)	H = 10 m - R = 30 m Max load 8 t - Fixing angles	2018
MDT 109	VALENTE (France)	Construction (France)	H = 34 m - R = 35 m Max load 6 t - Fixing angles	2022
MDT 109	VALENTE (France)	Construction (France)	H = 34 m - R = 35 m Max load 6 t - Fixing angles	2022
MCT 58	GLI EDF (France)	Power plant (France - Ile de la Réunion)	H = 19,7 m - R = 30 m Max load 3 t - Fixing angles	2020

The Manitowoc Company, Inc.

Regional headquarters

Americas
Milwaukee, Wisconsin, USA
Tel: +1 414 760 4600

Shady Grove, Pennsylvania, USA
Tel: +1 717 597 8121

Europe and Africa
Dardilly, France - TOWERS
Tel: +33 (0) 4 72 18 20 20

Wilhelmshaven, Germany - MOBILE
Tel.: +49 (0) 4421 294 0

APAC
Shanghai, China
Tel.: +86 21 6457 0066

Singapore
Tel.: +65 6264 1188

Middle East and India
Dubai, UAE
Tel: +971 4 8862677

Ref.: 02C_LiftSolutions_102022

www.manitowoc.com